

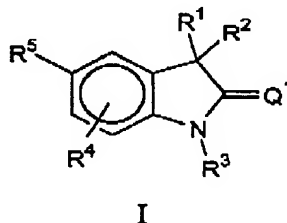
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## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1(Original). A method of inducing contraception comprising the step of delivering to a female of child-bearing age a composition comprising a compound of formula I, or a tautomer thereof, in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula I is:



wherein:

$R^1$  and  $R^2$  are selected from the group consisting of H, alkyl, substituted alkyl, OH, O(alkyl), O(substituted alkyl), O(Acetyl), aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, alkylaryl, substituted alkylaryl, alkylheteroaryl, substituted alkylheteroaryl, 1-propynyl, substituted 1-propynyl, 3-propynyl, and substituted 3-propynyl;

or  $R^1$  and  $R^2$  are joined to form a ring selected from the group consisting of  $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_m\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_p\text{O}-$ ,  $-\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{N}(\text{H})\text{CH}_2\text{CH}_2-$ , and  $-\text{CH}_2\text{CH}_2\text{N}(\text{alkyl})\text{CH}_2\text{CH}_2-$ ;

$m$  is an integer from 1 to 4;

$n$  is an integer from 1 to 5;

AHPWA24AUSA

p is an integer from 1 to 4;

or R<sup>1</sup> and R<sup>2</sup> form a double bond to C(CH<sub>3</sub>)<sub>2</sub>, C(cycloalkyl), O, or C(cycloether);

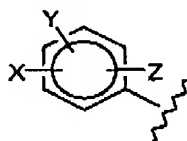
R<sup>3</sup> is selected from the group consisting of H, OH, NH<sub>2</sub>, C<sub>1</sub> to C<sub>6</sub> alkyl, substituted C<sub>1</sub> to C<sub>6</sub> alkyl, C<sub>3</sub> to C<sub>6</sub> alkenyl, substituted C<sub>3</sub> to C<sub>6</sub> alkenyl, alkynyl, substituted alkynyl, and COR<sup>A</sup>;

R<sup>A</sup> is selected from the group consisting of H, C<sub>1</sub> to C<sub>3</sub> alkyl, substituted C<sub>1</sub> to C<sub>3</sub> alkyl, C<sub>1</sub> to C<sub>3</sub> alkoxy, substituted C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>3</sub> aminoalkyl, and substituted C<sub>1</sub> to C<sub>3</sub> aminoalkyl;

R<sup>4</sup> is selected from the group consisting of H, halogen, CN, NH<sub>2</sub>, C<sub>1</sub> to C<sub>6</sub> alkyl, substituted C<sub>1</sub> to C<sub>6</sub> alkyl, C<sub>1</sub> to C<sub>6</sub> alkoxy, substituted C<sub>1</sub> to C<sub>6</sub> alkoxy, C<sub>1</sub> to C<sub>6</sub> aminoalkyl, and substituted C<sub>1</sub> to C<sub>6</sub> aminoalkyl;

R<sup>5</sup> is selected from the group consisting of a), b) and c):

a) a substituted benzene ring having the structure:



X is selected from the group consisting of halogen, OH, CN, C<sub>1</sub> to C<sub>3</sub> alkyl, substituted C<sub>1</sub> to C<sub>3</sub> alkyl, C<sub>1</sub> to C<sub>3</sub> alkoxy, substituted C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>3</sub> thioalkyl, substituted C<sub>1</sub> to C<sub>3</sub> thioalkyl, S(O)alkyl, S(O)<sub>2</sub>alkyl, C<sub>1</sub> to C<sub>3</sub> aminoalkyl, substituted C<sub>1</sub> to C<sub>3</sub> aminoalkyl, NO<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> perfluoroalkyl, substituted C<sub>1</sub> to C<sub>3</sub> perfluoroalkyl, 5 or 6 membered heterocyclic ring having 1 to 3 heteroatoms, CONH<sub>2</sub>, CSNH<sub>2</sub>, CNHNHOH, CNH<sub>2</sub>NOH, CNHNOH, COR<sup>B</sup>, CSR<sup>B</sup>, OCOR<sup>B</sup>, and NR<sup>C</sup>COR<sup>B</sup>;

R<sup>B</sup> is selected from the group consisting of H, C<sub>1</sub> to C<sub>3</sub> alkyl, substituted C<sub>1</sub> to C<sub>3</sub> alkyl, aryl, substituted aryl, C<sub>1</sub> to C<sub>3</sub> alkoxy, substituted C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>3</sub> aminoalkyl, and substituted C<sub>1</sub> to C<sub>3</sub> aminoalkyl;

R<sup>C</sup> is H, C<sub>1</sub> to C<sub>3</sub> alkyl, or substituted C<sub>1</sub> to C<sub>3</sub> alkyl;

Y and Z are independently selected from the group consisting of H, halogen, CN, NO<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkoxy, substituted C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>4</sub> alkyl, substituted C<sub>1</sub> to C<sub>4</sub> alkyl, C<sub>1</sub> to C<sub>3</sub> thioalkyl, and substituted C<sub>1</sub> to C<sub>3</sub> thioalkyl;

AHPWA24AUSA

b) a five or six membered heterocyclic ring having 1, 2, or 3 heteroatoms selected from the group consisting of O, S, SO, SO<sub>2</sub> and NR<sup>6</sup> and having one or two independent substituents from the group consisting of H, halogen, CN, NO<sub>2</sub>, C<sub>1</sub> to C<sub>4</sub> alkyl, substituted C<sub>1</sub> to C<sub>4</sub> alkyl, C<sub>1</sub> to C<sub>3</sub> alkoxy, substituted C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>3</sub> aminoalkyl, substituted C<sub>1</sub> to C<sub>3</sub> aminoalkyl, COR<sup>D</sup>, CSR<sup>D</sup>, and NR<sup>E</sup>COR<sup>D</sup>;

R<sup>D</sup> is H, NH<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkyl, substituted C<sub>1</sub> to C<sub>3</sub> alkyl, aryl, substituted aryl, C<sub>1</sub> to C<sub>3</sub> alkoxy, substituted C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>3</sub> aminoalkyl, or substituted C<sub>1</sub> to C<sub>3</sub> aminoalkyl;

R<sup>E</sup> is H, C<sub>1</sub> to C<sub>3</sub> alkyl, or substituted C<sub>1</sub> to C<sub>3</sub> alkyl;

R<sup>6</sup> is H, C<sub>1</sub> to C<sub>3</sub> alkyl, substituted C<sub>1</sub> to C<sub>3</sub> alkyl, or C<sub>1</sub> to C<sub>4</sub>CO<sub>2</sub>alkyl; or

c) an indol-4-yl, indol-7-yl or benzo-2-thiophene moiety, wherein said moiety is optionally substituted by from 1 to 3 substituents selected from the group consisting of halogen, alkyl, substituted alkyl, CN, NO<sub>2</sub>, alkoxy, substituted alkoxy, and CF<sub>3</sub>;

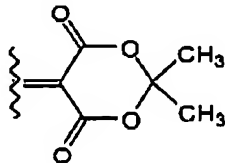
Q<sup>1</sup> is S, NR<sup>7</sup>, or CR<sup>8</sup>R<sup>9</sup>;

R<sup>7</sup> is selected from the group consisting of CN, C<sub>1</sub> to C<sub>6</sub> alkyl, substituted C<sub>1</sub> to C<sub>6</sub> alkyl, C<sub>3</sub> to C<sub>8</sub> cycloalkyl, substituted C<sub>3</sub> to C<sub>8</sub> cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, SO<sub>2</sub>CF<sub>3</sub>, OR<sup>11</sup>, and NR<sup>11</sup>R<sup>12</sup>;

R<sup>8</sup> and R<sup>9</sup> are independent substituents selected from the group consisting of H, alkyl, substituted alkyl, acyl, substituted acyl, aroyl, substituted aroyl, C<sub>3</sub> to C<sub>8</sub> cycloalkyl, substituted C<sub>3</sub> to C<sub>8</sub> cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, NO<sub>2</sub>, CN, and CO<sub>2</sub>R<sup>10</sup>;

R<sup>10</sup> is C<sub>1</sub> to C<sub>3</sub> alkyl or substituted C<sub>1</sub> to C<sub>3</sub> alkyl;

or CR<sup>8</sup>R<sup>9</sup> comprise a six membered ring having the structure:



AHPWA24AUSA

$R^{11}$  and  $R^{12}$  are independently selected from the group consisting of H, alkyl, substituted alkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, sulfonyl, and substituted sulfonyl; or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

2(Original). The method according to claim 1, wherein said compound of formula I and said selective estrogen receptor modulator are delivered in a single composition.

3(Original). The method according to claim 1, wherein said compound of formula I and said selective estrogen receptor modulator are delivered separately.

4(Original). The method according to claim 1, wherein said selective estrogen receptor modulator is selected from the group consisting of EM-800, EM-652, raloxifene hydrochloride, arzoxifene, lasofoxifene, droloxifene, tamoxifen citrate, 4-hydroxytamoxifen citrate, clomiphene citrate, toremifene citrate, pipendoxifene, idoxifene, levormeloxifene, centchroman, nafoxidene, and bazedoxifene.

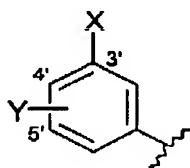
5(Original). The method according to claim 1, wherein said compound is delivered at a daily dosage of about 0.1 to about 50 mg.

6(Original). The method according to claim 1, wherein said regimen comprises delivering said composition daily for 1 to about 21 days, wherein said regimen is a cycle which is repeated monthly.

7(Original). The method according to claim 1, wherein said selective estrogen receptor modulator is delivered at a daily dosage of about 0.2 to about 100 mg.

AHPWA24AUSA

8(Original). The method according to Claim 1, wherein  $R^1$  and  $R^2$  are joined to form a  $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$  ring;  $n$  is 3;  $R^3$  and  $R^4$  are H;  $R^5$  is the substituted benzene ring having the structure:

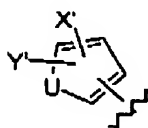


$X$  is selected from the group consisting of halogen, CN,  $\text{CONH}_2$ ,  $\text{CSNH}_2$ ,  $\text{COR}^B$ ,  $\text{CSR}^B$ ,  $\text{C}_1$  to  $\text{C}_3$  alkoxy,  $\text{C}_1$  to  $\text{C}_3$  alkyl,  $\text{NO}_2$ ,  $\text{C}_1$  to  $\text{C}_3$  perfluoroalkyl, 5 membered heterocyclic ring having 1 to 3 heteroatoms, and  $\text{C}_1$  to  $\text{C}_3$  thioalkyl;

$R^B$  is  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl or substituted  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl, wherein said aminoalkyl is  $\text{NH}(\text{alkyl})$  or  $\text{N}(\text{alkyl})_2$ ;

$Y$  is selected from the group consisting of H, halogen, CN,  $\text{NO}_2$ ,  $\text{C}_1$  to  $\text{C}_3$  alkoxy,  $\text{C}_1$  to  $\text{C}_4$  alkyl, and  $\text{C}_1$  to  $\text{C}_3$  thioalkyl.

9(Original). The method according to Claim 1, wherein  $R^1$  and  $R^2$  are joined to form the  $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$  ring;  $n$  is 3;  $R^3$  and  $R^4$  are H;  $R^5$  is the five membered ring having the structure:



$U$  is O, S, or  $\text{NR}^6$ ;

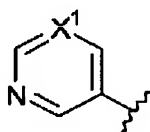
$X'$  is selected from the group consisting of halogen, CN,  $\text{NO}_2$ ,  $\text{CONH}_2$ ,  $\text{CSNH}_2$ ,  $\text{COR}^B$ ,  $\text{CSR}^B$ ,  $\text{C}_1$  to  $\text{C}_3$  alkyl, and  $\text{C}_1$  to  $\text{C}_3$  alkoxy;

$R^B$  is  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl or substituted  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl, wherein said aminoalkyl is  $\text{NH}(\text{alkyl})$  or  $\text{N}(\text{alkyl})_2$ ;

$Y'$  is selected from the group consisting of H, halogen, and  $\text{C}_1$  to  $\text{C}_4$  alkyl, wherein said halogen is F.

AHPWA24AUSA

10(Original). The method according to Claim 1, wherein  $R^1$  and  $R^2$  are joined to form a  $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$  ring;  $n$  is 3;  $R^3$  and  $R^4$  are H;  $R^5$  is the six membered ring having the structure:



$X^1$  is N or  $\text{CX}^2$ ;

$X^2$  is halogen, CN,  $\text{CONH}_2$ ,  $\text{CSNH}_2$ ,  $\text{COR}^B$ ,  $\text{CSR}^B$ , or  $\text{NO}_2$ ;

$R^B$  is  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl or substituted  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl, wherein said aminoalkyl is  $\text{NH}(\text{alkyl})$  or  $\text{N}(\text{alkyl})_2$ .

11(Original). The method according to claim 1, wherein  $R^1$  and  $R^2$  are alkyl or substituted alkyl;  $R^3$  is H.

12(Original). The method according to claim 1, wherein  $R^1$  and  $R^2$  are joined to form a ring selected from the group consisting of  $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_m\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_p\text{O}-$ ,  $-\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{N}(\text{H})\text{CH}_2\text{CH}_2-$ , and  $-\text{CH}_2\text{CH}_2\text{N}(\text{alkyl})\text{CH}_2\text{CH}_2-$ ;  $R^3$  is H.

13(Original). The method according to claim 1, wherein  $R^3$  is H;  $Q^1$  is S or  $\text{NR}^7$ .

14(Original). The method according to claim 1, wherein said compound is selected from the group consisting of 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-thione, 3-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzonitrile, 4-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-2-thiophenecarbonitrile, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 4-Methyl-5-(1,2-dihydro-2-thioxospiro[cyclohexane-1,3-[3H]-indol]-5-yl)-2-thiophenethioamide, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-

AHPWA24AUSA

[3H]indol]-5-yl)-1-(tert-butoxycarbonyl)-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-H-pyrrole-2-carbonitrile, 5-(2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-3-thiophenecarbonitrile, 5-(1,2-Dihydro-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-2-thiophenecarbonitrile, 5-(3-Fluoro-4-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(2-Amino-5-pyrimidinyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 5-(3-chlorophenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-Benzyl-5-(3-chlorophenyl)-3-methyl-1,3-dihydro-2H-indole-2-thione, 4-(3,3-dimethyl-2-thioxo-2,3-dihydro-1H-indol-5-yl)-2-furonitrile, 5-(3-methoxyphenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-pyridinecarbonitrile, 5-(3,4-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(5-Chloro-2-thienyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-furancarbonitrile, 5-(3-Chloro-4-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chloro-5-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3,5-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-propyl-2-thiophenecarbonitrile, 5-(3-Fluoro-4-nitrophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-furancarbonitrile, 5''-(3-Chlorophenyl)spiro[cyclobutane-1,3''-[3H]indol]-2''(1''H)-thione, 5''-(2-Chlorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5''-(4-Chlorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5-(1'',2''-Dihydro-2''-thioxospiro[cyclohexane-1,3''-[3H]indol]-5''-yl)-4-methyl-2-thiophenecarbonitrile, 5-(1'',2''-Dihydro-2''-thioxospiro[cyclohexane-1,3''-[3H]indol]-5''-yl)-2-thiophenecarbonitrile, 5''-(3-Fluorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5-(3-Hydroxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-

AHPWA24AUSA

chlorophenyl)-3,3-diethyl-1,3-dihydro-2H-indole-2-thione, 5-(4-Fluoro-3-(trifluoromethyl)phenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-n-butyl-2-thiophenecarbonitrile, 5-(3-Fluoro-5-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chlorophenyl)-N-hydroxyspiro[cyclohexane-1,3'-[3H]indol]-2-amine, N-(Acetyloxy)-5'-(3-chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''amine, 5'-(3-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(2-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(4-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3,4-difluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-methoxyphenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-nitrophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-cyanophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 3-(1',2'-Dihydro-2'-(hydroxyimino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluorobenzonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-1-methyl-2-carbonitrile, 5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-2-carbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(acetoxymino)-5'-yl)-2-thiophenecarbonitrile, 3-Fluoro-N'-hydroxy-5-(2'-(hydroxyamino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarboximidamide, N'-Hydroxy-4-(spiro[cyclohexane-1,3'-[3H]indol]-2'-hydroxyimino)-5'-yl-2-thiophenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarboxidamide, 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(3-Cyano-5-fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-1H-

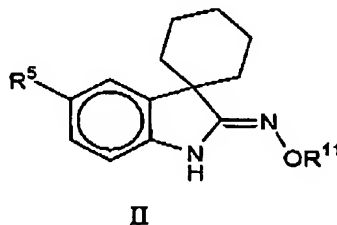


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pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2-ylidenecyanamide, 5'-(5-Cyano-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-3-methyl-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-thiophen-3-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 3-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluoro-benzonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-4-methyl-thiophene-2-carbonitrile, and 4-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

15(Currently Amended). The method according to ~~any of claims~~ claim 1, wherein said compound is 5'-(5-Cyano-1-methyl-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

16(Original). A method of inducing contraception comprising the step of delivering to a female of child-bearing age a composition comprising a compound of formula II, or a tautomer thereof, in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula II is:



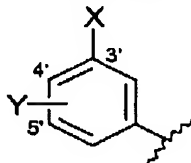
wherein:

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$R^{11}$  is selected from the group consisting of H, acyl, substituted acyl, aroyl, substituted aroyl, sulfonyl, and substituted sulfonyl;

$R^5$  is (i), (ii), or (iii):

(i) a substituted benzene ring having the structure:

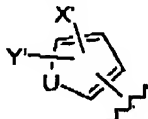


wherein:

X is selected from the group consisting of halogen, CN, CONH<sub>2</sub>, CSNH<sub>2</sub>, CONHalkyl, CSNHalkyl, CON(alkyl)<sub>2</sub>, CSN(alkyl)<sub>2</sub>, CNHNHOH, CNH<sub>2</sub>NOH, C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>3</sub> alkyl, NO<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> perfluoroalkyl, 5 membered heterocyclic ring having 1 to 3 heteroatoms, and C<sub>1</sub> to C<sub>3</sub> thioalkyl;

Y is selected from the group consisting of H, halogen, CN, NO<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>4</sub> alkyl, and C<sub>1</sub> to C<sub>3</sub> thioalkyl;

(ii) a five membered ring having the structure:



wherein:

U is O, S, or NR<sup>6</sup>;

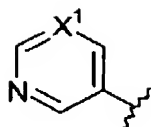
R<sup>6</sup> is H, C<sub>1</sub> to C<sub>3</sub> alkyl, or C<sub>1</sub> to C<sub>4</sub> CO<sub>2</sub>alkyl;

X' is selected from the group consisting of halogen, CN, NO<sub>2</sub>, CONH<sub>2</sub>, CNHNHOH, CNH<sub>2</sub>NOH, CSNH<sub>2</sub>, CONHalkyl, CSNHalkyl, CON(alkyl)<sub>2</sub>, CSN(alkyl)<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkyl, and C<sub>1</sub> to C<sub>3</sub> alkoxy;

Y' is selected from the group consisting of H, F, and C<sub>1</sub> to C<sub>4</sub> alkyl; or

(iii) a six membered ring having the structure:

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wherein:

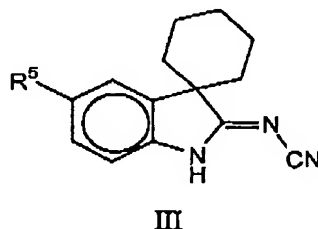
$X^1$  is N or  $CX^2$ ;

$X^2$  is halogen, CN,  $CONH_2$ ,  $CSNH_2$ ,  $CONHalkyl$ ,  $CSNHalkyl$ ,  $CON(alkyl)_2$ ,  $CSN(alkyl)_2$  or  $NO_2$ ;

or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

17(Original). The method according to claim 16, wherein  $R^5$  is said five membered ring and U is O or S.

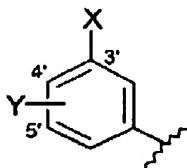
18(Original). A method of inducing contraception comprising the step of delivering to a female of child-bearing age a composition comprising a compound of formula III in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula III is:



wherein:

$R^5$  is (i), (ii), or (iii):

(i) a substituted benzene ring having the structure:



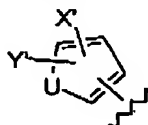
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wherein:

X is selected from the group consisting of halogen, CN, CONH<sub>2</sub>, CSNH<sub>2</sub>, CONHalkyl, CSNHalkyl, CON(alkyl)<sub>2</sub>, CSN(alkyl)<sub>2</sub>, CNHNOH, C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>3</sub> alkyl, NO<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> perfluoroalkyl, 5 membered heterocyclic ring having 1 to 3 heteroatoms, and C<sub>1</sub> to C<sub>3</sub> thioalkyl;

Y is selected from the group consisting of H, halogen, CN, NO<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>4</sub> alkyl, and C<sub>1</sub> to C<sub>3</sub> thioalkyl;

(ii) a five membered ring having the structure:



wherein:

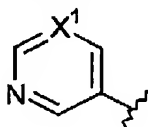
U is O, S, or NR<sup>6</sup>;

R<sup>6</sup> is H, C<sub>1</sub> to C<sub>3</sub> alkyl, or C<sub>1</sub> to C<sub>4</sub> CO<sub>2</sub>alkyl;

X' is selected from the group consisting of halogen, CN, NO<sub>2</sub>, CONH<sub>2</sub>, CSNH<sub>2</sub>, CONHalkyl, CSNHalkyl, CON(alkyl)<sub>2</sub>, CSN(alkyl)<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkyl, and C<sub>1</sub> to C<sub>3</sub> alkoxy;

Y' is selected from the group consisting of H, F and C<sub>1</sub> to C<sub>4</sub> alkyl; or

(iii) a six membered ring having the structure:



wherein:

X<sup>1</sup> is N or CX<sup>2</sup>;

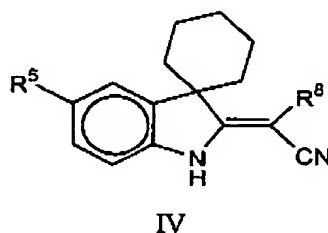
X<sup>2</sup> is halogen, CN, CONH<sub>2</sub>, CSNH<sub>2</sub>, CONHalkyl, CSNHalkyl, CON(alkyl)<sub>2</sub>, CSN(alkyl)<sub>2</sub> or NO<sub>2</sub>;

or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

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19(Original). The method according to claim 17, wherein  $R^5$  is the five membered ring (ii) and U is O or S.

20(Original). A method of inducing contraception comprising the step of delivering to a female of child-bearing age a composition comprising a compound of formula IV in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula IV is:



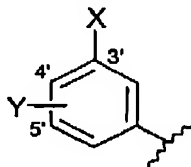
wherein:

$R^8$  is selected from the group consisting of H,  $CO_2R^{10}$ , acyl, substituted acyl, aroyl, substituted aroyl, alkyl, substituted alkyl, and CN;

$R^{10}$  is  $C_1$  to  $C_3$  alkyl;

$R^5$  is (i), (ii), or (iii):

(i) a substituted benzene ring having the structure:



wherein:

X is selected from the group consisting of halogen, CN,  $CONH_2$ ,  $CSNH_2$ ,  $CONHalkyl$ ,  $CSNHalkyl$ ,  $CON(alkyl)_2$ ,  $CSN(alkyl)_2$ ,  $CNHNOH$ ,  $C_1$  to  $C_3$  alkoxy,  $C_1$  to  $C_3$  alkyl,  $NO_2$ ,  $C_1$  to  $C_3$  perfluoroalkyl, 5 membered heterocyclic ring having 1 to 3 heteroatoms, and  $C_1$  to  $C_3$  thioalkyl;

AHPWA24AUSA

Y is selected from the group consisting of H, halogen, CN, NO<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>4</sub> alkyl, and C<sub>1</sub> to C<sub>3</sub> thioalkyl;

(ii) a five membered ring having the structure:



wherein:

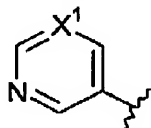
U is O, S, or NR<sup>6</sup>;

R<sup>6</sup> is H, C<sub>1</sub> to C<sub>3</sub> alkyl, or C<sub>1</sub> to C<sub>4</sub> CO<sub>2</sub>alkyl;

X' is selected from the group consisting of halogen, CN, NO<sub>2</sub>, CONH<sub>2</sub>, CSNH<sub>2</sub>, CONHalkyl, CSNHalkyl, CON(alkyl)<sub>2</sub>, CSN(alkyl)<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkyl, and C<sub>1</sub> to C<sub>3</sub> alkoxy;

Y' is selected from the group consisting of H, F and C<sub>1</sub> to C<sub>4</sub> alkyl;

(iii) a six membered ring having the structure:



wherein:

X<sup>1</sup> is N or CX<sup>2</sup>;

X<sup>2</sup> is halogen, CN, CONH<sub>2</sub>, CSNH<sub>2</sub>, CONHalkyl, CSNHalkyl, CON(alkyl)<sub>2</sub>, CSN(alkyl)<sub>2</sub> or NO<sub>2</sub>;

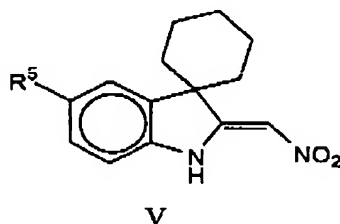
or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

21(Original). The method according to claim 10, wherein R<sup>5</sup> is the five-membered ring (ii) and U is O or S.

22(Original). A method of inducing contraception comprising the step of delivering to a female of child-bearing age a composition comprising a compound of formula V in a regimen which involves delivering a pharmaceutically effective amount of

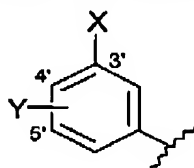
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one or more of a selective estrogen receptor modulator to said female, wherein formula V is:



$R^5$  is (i), (ii), or (iii):

(i) a substituted benzene ring having the structure:

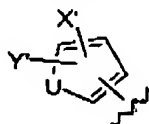


wherein:

X is selected from the group consisting of halogen, CN, CONH<sub>2</sub>, CSNH<sub>2</sub>, CONHalkyl, CSNHalkyl, CON(alkyl)<sub>2</sub>, CSN(alkyl)<sub>2</sub>, CNHNOH, C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>3</sub> alkyl, NO<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> perfluoroalkyl, 5 membered heterocyclic ring having 1 to 3 heteroatoms, and C<sub>1</sub> to C<sub>3</sub> thioalkyl;

Y is selected from the group consisting of H, halogen, CN, NO<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>4</sub> alkyl, and C<sub>1</sub> to C<sub>3</sub> thioalkyl;

(ii) a five membered ring having the structure:



wherein:

U is O, S, or NR<sup>6</sup>;

R<sup>6</sup> is H, C<sub>1</sub> to C<sub>3</sub> alkyl, or C<sub>1</sub> to C<sub>4</sub> CO<sub>2</sub>alkyl;

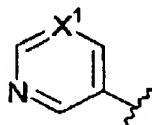
X' is selected from the group consisting of halogen, CN, NO<sub>2</sub>, CONH<sub>2</sub>,

AHPWA24AUSA

CSNH<sub>2</sub>, CONHalkyl, CSNHalkyl, CON(alkyl)<sub>2</sub>, CSN(alkyl)<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkyl, and C<sub>1</sub> to C<sub>3</sub> alkoxy;

Y' is selected from the group consisting of H, F, and C<sub>1</sub> to C<sub>4</sub> alkyl;

(iii) a six membered ring having the structure:



wherein:

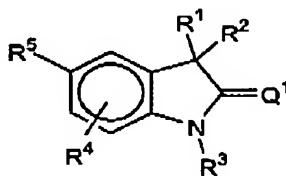
X<sup>1</sup> is N or CX<sup>2</sup>;

X<sup>2</sup> is halogen, CN, CONH<sub>2</sub>, CSNH<sub>2</sub>, CONHalkyl, CSNHalkyl, CON(alkyl)<sub>2</sub>, CSN(alkyl)<sub>2</sub> or NO<sub>2</sub>;

or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

23(Original). The method according to claim 22, wherein R<sup>5</sup> is the five membered ring (ii) and U is O or S.

24(Withdrawn). A method of providing hormone replacement therapy comprising the step of delivering to a female a composition comprising a compound of formula I, or a tautomer thereof, in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula I is:



I

wherein:

R<sup>1</sup> and R<sup>2</sup> are selected from the group consisting of H, alkyl, substituted alkyl, OH, O(alkyl), O(substituted alkyl), O(Acetyl), aryl, substituted aryl, heterocyclic ring,



AHPWA24AUSA

substituted heterocyclic ring, alkylaryl, substituted alkylaryl, alkylheteroaryl, substituted alkylheteroaryl, 1-propynyl, substituted 1-propynyl, 3-propynyl, and substituted 3-propynyl;

or  $R^1$  and  $R^2$  are joined to form a ring selected from the group consisting of  $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_m\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_p\text{O}-$ ,  $-\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{N}(\text{H})\text{CH}_2\text{CH}_2-$ , and  $-\text{CH}_2\text{CH}_2\text{N}(\text{alkyl})\text{CH}_2\text{CH}_2-$ ;

$m$  is an integer from 1 to 4;

$n$  is an integer from 1 to 5;

$p$  is an integer from 1 to 4;

or  $R^1$  and  $R^2$  form a double bond to  $\text{C}(\text{CH}_3)_2$ ,  $\text{C}(\text{cycloalkyl})$ ,  $\text{O}$ , or  $\text{C}(\text{cycloether})$ ;

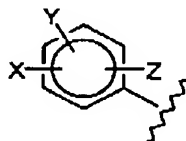
$R^3$  is selected from the group consisting of  $\text{H}$ ,  $\text{OH}$ ,  $\text{NH}_2$ ,  $\text{C}_1$  to  $\text{C}_6$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_6$  alkyl,  $\text{C}_3$  to  $\text{C}_6$  alkenyl, substituted  $\text{C}_3$  to  $\text{C}_6$  alkenyl, alkynyl, substituted alkynyl, and  $\text{COR}^A$ ;

$R^A$  is selected from the group consisting of  $\text{H}$ ,  $\text{C}_1$  to  $\text{C}_3$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_3$  alkyl,  $\text{C}_1$  to  $\text{C}_3$  alkoxy, substituted  $\text{C}_1$  to  $\text{C}_3$  alkoxy,  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl, and substituted  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl;

$R^4$  is selected from the group consisting of  $\text{H}$ , halogen,  $\text{CN}$ ,  $\text{NH}_2$ ,  $\text{C}_1$  to  $\text{C}_6$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_6$  alkyl,  $\text{C}_1$  to  $\text{C}_6$  alkoxy, substituted  $\text{C}_1$  to  $\text{C}_6$  alkoxy,  $\text{C}_1$  to  $\text{C}_6$  aminoalkyl, and substituted  $\text{C}_1$  to  $\text{C}_6$  aminoalkyl;

$R^5$  is selected from the group consisting of a), b) and c):

a) a substituted benzene ring having the structure:



$X$  is selected from the group consisting of halogen,  $\text{OH}$ ,  $\text{CN}$ ,  $\text{C}_1$  to  $\text{C}_3$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_3$  alkyl,  $\text{C}_1$  to  $\text{C}_3$  alkoxy, substituted  $\text{C}_1$  to  $\text{C}_3$  alkoxy,  $\text{C}_1$  to  $\text{C}_3$  thioalkyl, substituted  $\text{C}_1$  to  $\text{C}_3$  thioalkyl,  $\text{S}(\text{O})\text{alkyl}$ ,  $\text{S}(\text{O})_2\text{alkyl}$ ,  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl, substituted  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl,  $\text{NO}_2$ ,  $\text{C}_1$  to  $\text{C}_3$  perfluoroalkyl, substituted  $\text{C}_1$  to  $\text{C}_3$

AHPWA24AUSA

perfluoroalkyl, 5 or 6 membered heterocyclic ring having 1 to 3 heteroatoms,  $\text{CONH}_2$ ,  $\text{CSNH}_2$ ,  $\text{CNHNHOH}$ ,  $\text{CNH}_2\text{NOH}$ ,  $\text{CNHNOH}$ ,  $\text{COR}^B$ ,  $\text{CSR}^B$ ,  $\text{OCOR}^B$ , and  $\text{NR}^C\text{COR}^B$ ;

$\text{R}^B$  is selected from the group consisting of H,  $\text{C}_1$  to  $\text{C}_3$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_3$  alkyl, aryl, substituted aryl,  $\text{C}_1$  to  $\text{C}_3$  alkoxy, substituted  $\text{C}_1$  to  $\text{C}_3$  alkoxy,  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl, and substituted  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl;

$\text{R}^C$  is H,  $\text{C}_1$  to  $\text{C}_3$  alkyl, or substituted  $\text{C}_1$  to  $\text{C}_3$  alkyl;

Y and Z are independently selected from the group consisting of H, halogen, CN,  $\text{NO}_2$ ,  $\text{C}_1$  to  $\text{C}_3$  alkoxy, substituted  $\text{C}_1$  to  $\text{C}_3$  alkoxy,  $\text{C}_1$  to  $\text{C}_4$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_4$  alkyl,  $\text{C}_1$  to  $\text{C}_3$  thioalkyl, and substituted  $\text{C}_1$  to  $\text{C}_3$  thioalkyl;

b) a five or six membered heterocyclic ring having 1, 2, or 3 heteroatoms selected from the group consisting of O, S, SO,  $\text{SO}_2$  and  $\text{NR}^6$  and having one or two independent substituents from the group consisting of H, halogen, CN,  $\text{NO}_2$ ,  $\text{C}_1$  to  $\text{C}_4$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_4$  alkyl,  $\text{C}_1$  to  $\text{C}_3$  alkoxy, substituted  $\text{C}_1$  to  $\text{C}_3$  alkoxy,  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl, substituted  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl,  $\text{COR}^D$ ,  $\text{CSR}^D$ , and  $\text{NR}^E\text{COR}^D$ ;

$\text{R}^D$  is H,  $\text{NH}_2$ ,  $\text{C}_1$  to  $\text{C}_3$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_3$  alkyl, aryl, substituted aryl,  $\text{C}_1$  to  $\text{C}_3$  alkoxy, substituted  $\text{C}_1$  to  $\text{C}_3$  alkoxy,  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl, or substituted  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl;

$\text{R}^E$  is H,  $\text{C}_1$  to  $\text{C}_3$  alkyl, or substituted  $\text{C}_1$  to  $\text{C}_3$  alkyl;

$\text{R}^6$  is H,  $\text{C}_1$  to  $\text{C}_3$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_3$  alkyl, or  $\text{C}_1$  to  $\text{C}_4\text{CO}_2\text{alkyl}$ ; or

c) an indol-4-yl, indol-7-yl or benzo-2-thiophene moiety, wherein said moiety is optionally substituted by from 1 to 3 substituents selected from the group consisting of halogen, alkyl, substituted alkyl, CN,  $\text{NO}_2$ , alkoxy, substituted alkoxy, and  $\text{CF}_3$ ;

$\text{Q}^1$  is S,  $\text{NR}^7$ , or  $\text{CR}^8\text{R}^9$ ;

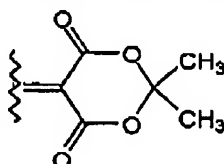
$\text{R}^7$  is selected from the group consisting of CN,  $\text{C}_1$  to  $\text{C}_6$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_6$  alkyl,  $\text{C}_3$  to  $\text{C}_8$  cycloalkyl, substituted  $\text{C}_3$  to  $\text{C}_8$  cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl,  $\text{SO}_2\text{CF}_3$ ,  $\text{OR}^{11}$ , and  $\text{NR}^{11}\text{R}^{12}$ ;

AHPWA24AUSA

$R^8$  and  $R^9$  are independent substituents selected from the group consisting of H,  $C_1$  to  $C_6$  alkyl, substituted  $C_1$  to  $C_6$  alkyl,  $C_3$  to  $C_8$  cycloalkyl, substituted  $C_3$  to  $C_8$  cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring,  $NO_2$ , CN, and  $CO_2R^{10}$ ;

$R^{10}$  is  $C_1$  to  $C_3$  alkyl or substituted  $C_1$  to  $C_3$  alkyl;

or  $CR^8R^9$  comprise a six membered ring having the structure:



$R^{11}$  and  $R^{12}$  are independently selected from the group consisting of H, alkyl, substituted alkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, sulfonyl, and substituted sulfonyl; or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

25(Withdrawn). The method according to claim 23, wherein said hormone replacement therapy is perimenopausal, menopausal, or postmenopausal.

26(Withdrawn). The method according to claim 24, wherein  $R^1$  and  $R^2$  are alkyl or substituted alkyl;  $R^3$  is H.

27(Withdrawn). The method according to claim 24, wherein  $R^1$  and  $R^2$  are joined to form a ring selected from the group consisting of  $-CH_2(CH_2)_nCH_2-$ ,  $-CH_2CH_2C(CH_3)_2CH_2CH_2-$ ,  $-O(CH_2)_mCH_2-$ ,  $-O(CH_2)_pO-$ ,  $-CH_2CH_2OCH_2CH_2-$ ,  $-CH_2CH_2N(H)CH_2CH_2-$ , and  $-CH_2CH_2N(alkyl)CH_2CH_2-$ ;  $R^3$  is H.

28(Withdrawn). The method according to claim 24, wherein  $R^3$  is H;  $Q^1$  is S or  $NR^7$ .

AHPWA24AUSA

29(Withdrawn). The method according to claim 24, wherein said compound is selected from the group consisting of 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1H)-thione, 3-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzonitrile, 4-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-2-thiophenecarbonitrile, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 4-Methyl-5-(1,2-dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-thiophenethioamide, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-(tert-butoxycarbonyl)-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-H-pyrrole-2-carbonitrile, 5-(2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-3-thiophenecarbonitrile, 5-(1,2-Dihydro-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-2-thiophenecarbonitrile, 5-(3-Fluoro-4-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(2-Amino-5-pyrimidinyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 5-(3-chlorophenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-Benzyl-5-(3-chlorophenyl)-3-methyl-1,3-dihydro-2H-indole-2-thione, 4-(3,3-dimethyl-2-thioxo-2,3-dihydro-1H-indol-5-yl)-2-furonitrile, 5-(3-methoxyphenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-pyridinecarbonitrile, 5-(3,4-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(5-Chloro-2-thienyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-furancarbonitrile, 5-(3-Chloro-4-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chloro-5-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3,5-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-propyl-2-thiophenecarbonitrile, 5-(3-Fluoro-4-nitrophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-

AHPWA24AUSA

thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-furancarbonitrile, 5''-(3-Chlorophenyl)spiro[cyclobutane-1,3''-[3H]indol]-2''(1''H)-thione, 5''-(2-Chlorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5''-(4-Chlorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5-(1'',2''-Dihydro-2''-thioxospiro[cyclohexane-1,3''-[3H]indol]-5''-yl)-4-methyl-2-thiophenecarbonitrile, 5-(1'',2''-Dihydro-2''-thioxospiro[cyclohexane-1,3''-[3H]indol]-5''-yl)-2-thiophenecarbonitrile, 5''-(3-Fluorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5-(3-Hydroxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-chlorophenyl)-3,3-diethyl-1,3-dihydro-2H-indole-2-thione, 5-(4-Fluoro-3-(trifluoromethyl)phenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-n-butyl-2-thiophenecarbonitrile, 5-(3-Fluoro-5-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chlorophenyl)-N-hydroxyspiro[cyclohexane-1,3''-[3H]indol]-2-amine, N-(Acetyloxy)-5'-(3-chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''amine, 5'-(3-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(2-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(4-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3,4-difluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-methoxyphenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-nitrophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-cyanophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 3-(1',2'-Dihydro-2'-(hydroxyimino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluorobenzonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-1-methyl-2-carbonitrile,

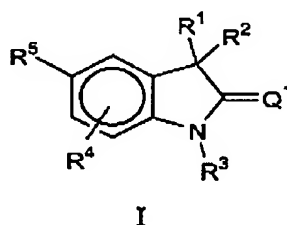
AHPWA24AUSA

5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-2-carbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(acetoxyimino)-5'-yl)-2-thiophenecarbonitrile, 3-Fluoro-N'-hydroxy-5-(2'-(hydroxyamino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarboximidamide, N'-Hydroxy-4-(spiro[cyclohexane-1,3'-[3H]indol]-2'-hydroxyimino)-5'-yl-2-thiophenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarboximidamide, 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(3-Cyano-5-fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-3-methyl-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-thiophen-3-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 3-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluoro-benzonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-4-methyl-thiophene-2-carbonitrile, and 4-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

30(Withdrawn). The method according to claim 24, wherein said compound is 5'-(5-Cyano-1-methyl-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

AHPWA24AUSA

31(Withdrawn). A method of treating carcinomas comprising the step of delivering to a mammal in need thereof a composition comprising a compound of formula I, or a tautomer thereof, in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said mammal, wherein formula I is:



wherein:

$R^1$  and  $R^2$  are selected from the group consisting of H, alkyl, substituted alkyl, OH, O(alkyl), O(substituted alkyl), O(Acetyl), aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, alkylaryl, substituted alkylaryl, alkylheteroaryl, substituted alkylheteroaryl, 1-propynyl, substituted 1-propynyl, 3-propynyl, and substituted 3-propynyl;

or  $R^1$  and  $R^2$  are joined to form a ring selected from the group consisting of  $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_m\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_p\text{O}-$ ,  $-\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{N}(\text{H})\text{CH}_2\text{CH}_2-$ , and  $-\text{CH}_2\text{CH}_2\text{N}(\text{alkyl})\text{CH}_2\text{CH}_2-$ ;

$m$  is an integer from 1 to 4;

$n$  is an integer from 1 to 5;

$p$  is an integer from 1 to 4;

or  $R^1$  and  $R^2$  form a double bond to  $\text{C}(\text{CH}_3)_2$ ,  $\text{C}(\text{cycloalkyl})$ , O, or  $\text{C}(\text{cycloether})$ ;

$R^3$  is selected from the group consisting of H, OH,  $\text{NH}_2$ ,  $\text{C}_1$  to  $\text{C}_6$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_6$  alkyl,  $\text{C}_3$  to  $\text{C}_6$  alkenyl, substituted  $\text{C}_3$  to  $\text{C}_6$  alkenyl, alkynyl, substituted alkynyl, and  $\text{COR}^A$ ;

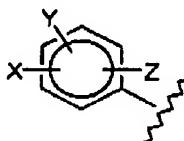
$R^A$  is selected from the group consisting of H,  $\text{C}_1$  to  $\text{C}_3$  alkyl, substituted  $\text{C}_1$  to  $\text{C}_3$  alkyl,  $\text{C}_1$  to  $\text{C}_3$  alkoxy, substituted  $\text{C}_1$  to  $\text{C}_3$  alkoxy,  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl, and substituted  $\text{C}_1$  to  $\text{C}_3$  aminoalkyl;

AHPWA24AUSA

$R^4$  is selected from the group consisting of H, halogen, CN,  $NH_2$ ,  $C_1$  to  $C_6$  alkyl, substituted  $C_1$  to  $C_6$  alkyl,  $C_1$  to  $C_6$  alkoxy, substituted  $C_1$  to  $C_6$  alkoxy,  $C_1$  to  $C_6$  aminoalkyl, and substituted  $C_1$  to  $C_6$  aminoalkyl;

$R^5$  is selected from the group consisting of a), b) and c):

a) a substituted benzene ring having the structure:



X is selected from the group consisting of halogen, OH, CN,  $C_1$  to  $C_3$  alkyl, substituted  $C_1$  to  $C_3$  alkyl,  $C_1$  to  $C_3$  alkoxy, substituted  $C_1$  to  $C_3$  alkoxy,  $C_1$  to  $C_3$  thioalkyl, substituted  $C_1$  to  $C_3$  thioalkyl,  $S(O)alkyl$ ,  $S(O)_2alkyl$ ,  $C_1$  to  $C_3$  aminoalkyl, substituted  $C_1$  to  $C_3$  aminoalkyl,  $NO_2$ ,  $C_1$  to  $C_3$  perfluoroalkyl, substituted  $C_1$  to  $C_3$  perfluoroalkyl, 5 or 6 membered heterocyclic ring having 1 to 3 heteroatoms,  $CONH_2$ ,  $CSNH_2$ ,  $CNHNHOH$ ,  $CNH_2NOH$ ,  $CNHNOH$ ,  $COR^B$ ,  $CSR^B$ ,  $OCOR^B$ , and  $NR^C COR^B$ ;

$R^B$  is selected from the group consisting of H,  $C_1$  to  $C_3$  alkyl, substituted  $C_1$  to  $C_3$  alkyl, aryl, substituted aryl,  $C_1$  to  $C_3$  alkoxy, substituted  $C_1$  to  $C_3$  alkoxy,  $C_1$  to  $C_3$  aminoalkyl, and substituted  $C_1$  to  $C_3$  aminoalkyl;

$R^C$  is H,  $C_1$  to  $C_3$  alkyl, or substituted  $C_1$  to  $C_3$  alkyl;

Y and Z are independently selected from the group consisting of H, halogen, CN,  $NO_2$ ,  $C_1$  to  $C_3$  alkoxy, substituted  $C_1$  to  $C_3$  alkoxy,  $C_1$  to  $C_4$  alkyl, substituted  $C_1$  to  $C_4$  alkyl,  $C_1$  to  $C_3$  thioalkyl, and substituted  $C_1$  to  $C_3$  thioalkyl;

b) a five or six membered heterocyclic ring having 1, 2, or 3 heteroatoms selected from the group consisting of O, S, SO,  $SO_2$  and  $NR^6$  and having one or two independent substituents from the group consisting of H, halogen, CN,  $NO_2$ ,  $C_1$  to  $C_4$  alkyl, substituted  $C_1$  to  $C_4$  alkyl,  $C_1$  to  $C_3$  alkoxy, substituted  $C_1$  to  $C_3$  alkoxy,  $C_1$  to  $C_3$  aminoalkyl, substituted  $C_1$  to  $C_3$  aminoalkyl,  $COR^D$ ,  $CSR^D$ , and  $NR^E COR^D$ ;

$R^D$  is H,  $NH_2$ ,  $C_1$  to  $C_3$  alkyl, substituted  $C_1$  to  $C_3$  alkyl, aryl, substituted aryl,  $C_1$  to  $C_3$  alkoxy, substituted  $C_1$  to  $C_3$  alkoxy,  $C_1$  to  $C_3$  aminoalkyl, or substituted  $C_1$  to  $C_3$  aminoalkyl;



AHPWA24AUSA

$R^E$  is H,  $C_1$  to  $C_3$  alkyl, or substituted  $C_1$  to  $C_3$  alkyl;

$R^6$  is H,  $C_1$  to  $C_3$  alkyl, substituted  $C_1$  to  $C_3$  alkyl, or  $C_1$  to  $C_4CO_2$ alkyl; or

c) an indol-4-yl, indol-7-yl or benzo-2-thiophene moiety, wherein said moiety is optionally substituted by from 1 to 3 substituents selected from the group consisting of halogen, alkyl, substituted alkyl, CN,  $NO_2$ , alkoxy, substituted alkoxy, and  $CF_3$ ;

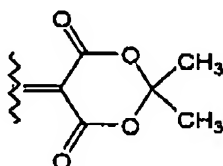
$Q^1$  is S,  $NR^7$ , or  $CR^8R^9$ ;

$R^7$  is selected from the group consisting of CN,  $C_1$  to  $C_6$  alkyl, substituted  $C_1$  to  $C_6$  alkyl,  $C_3$  to  $C_8$  cycloalkyl, substituted  $C_3$  to  $C_8$  cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl,  $SO_2CF_3$ ,  $OR^{11}$ , and  $NR^{11}R^{12}$ ;

$R^8$  and  $R^9$  are independent substituents selected from the group consisting of H,  $C_1$  to  $C_6$  alkyl, substituted  $C_1$  to  $C_6$  alkyl,  $C_3$  to  $C_8$  cycloalkyl, substituted  $C_3$  to  $C_8$  cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring,  $NO_2$ , CN, and  $CO_2R^{10}$ ;

$R^{10}$  is  $C_1$  to  $C_3$  alkyl or substituted  $C_1$  to  $C_3$  alkyl;

or  $CR^8R^9$  comprise a six membered ring having the structure:



$R^{11}$  and  $R^{12}$  are independently selected from the group consisting of H, alkyl, substituted alkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, sulfonyl, and substituted sulfonyl; or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

32(Withdrawn). The method according to claim 31, wherein said carcinomas are selected from the group consisting of ovary, breast, colon, endometrial, uterine, and prostate carcinomas.

AHPWA24AUSA

33(Withdrawn). The method according to claim 31, wherein  $R^1$  and  $R^2$  are alkyl or substituted alkyl;  $R^3$  is H.

34(Withdrawn). The method according to claim 31, wherein  $R^1$  and  $R^2$  are joined to form a ring selected from the group consisting of  $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_m\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_p\text{O}-$ ,  $-\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{N}(\text{H})\text{CH}_2\text{CH}_2-$ , and  $-\text{CH}_2\text{CH}_2\text{N}(\text{alkyl})\text{CH}_2\text{CH}_2-$ ;  $R^3$  is H.

35(Withdrawn). The method according to claim 31, wherein  $R^3$  is H;  $Q^1$  is S or  $\text{NR}^7$ .

36(Withdrawn). The method according to claim 31, wherein said compound is selected from the group consisting of 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1H)-thione, 3-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzonitrile, 4-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-2-thiophenecarbonitrile, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 4-Methyl-5-(1,2-dihydro-2-thioxospiro[cyclohexane-1,3-[3H]-indol]-5-yl)-2-thiophenethioamide, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-(tert-butoxycarbonyl)-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-H-pyrrole-2-carbonitrile, 5-(2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-3-thiophenecarbonitrile, 5-(1,2-Dihydro-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-2-thiophenecarbonitrile, 5-(3-Fluoro-4-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(2-Amino-5-pyrimidinyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 5-(3-chlorophenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-Benzyl-5-(3-chlorophenyl)-3-methyl-

AHPWA24AUSA

1,3-dihydro-2H-indole-2-thione, 4-(3,3-dimethyl-2-thioxo-2,3-dihydro-1H-indol-5-yl)-2-furonitrile, 5-(3-methoxyphenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-pyridinecarbonitrile, 5-(3,4-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(5-Chloro-2-thienyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-furancarbonitrile, 5-(3-Chloro-4-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chloro-5-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3,5-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-propyl-2-thiophenecarbonitrile, 5-(3-Fluoro-4-nitrophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-furancarbonitrile, 5''-(3-Chlorophenyl)spiro[cyclobutane-1,3''-[3H]indol]-2''(1''H)-thione, 5''-(2-Chlorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5''-(4-Chlorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5-(1'',2''-Dihydro-2''-thioxospiro[cyclohexane-1,3''-[3H]indol]-5''-yl)-4-methyl-2-thiophenecarbonitrile, 5-(1'',2''-Dihydro-2''-thioxospiro[cyclohexane-1,3''-[3H]indol]-5''-yl)-2-thiophenecarbonitrile, 5''-(3-Fluorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5-(3-Hydroxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-chlorophenyl)-3,3-diethyl-1,3-dihydro-2H-indole-2-thione, 5-(4-Fluoro-3-(trifluoromethyl)phenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-n-butyl-2-thiophenecarbonitrile, 5-(3-Fluoro-5-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chlorophenyl)-N-hydroxyspiro[cyclohexane-1,3'-[3H]indol]-2-amine, N-(Acetyloxy)-5'-(3-chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''amine, 5'-(3-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(2-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(4-

AHPWA24AUSA

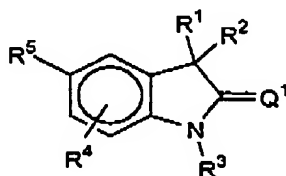
Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3,4-difluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-methoxyphenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-nitrophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-cyanophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 3-(1',2'-Dihydro-2'-(hydroxyimino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluorobenzonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-1-methyl-2-carbonitrile, 5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-2-carbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'(acetoxymino)-5'-yl)-2-thiophenecarbonitrile, 3-Fluoro-N'-hydroxy-5-(2'-(hydroxyamino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarboximidamide, N'-Hydroxy-4-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarboxidamide, 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(3-Cyano-5-fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-3-methyl-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-thiophen-3-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 3-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluoro-benzonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-4-

AHPWA24AUSA

methyl-thiophene-2-carbonitrile, and 4-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

37(Withdrawn). The method according to claim 31, wherein said compound is 5'-(5-Cyano-1-methyl-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-yridenecyanamide, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

38(Withdrawn). A method of treating dysfunctional bleeding, uterine leiomyomata, endometriosis, and/or polycystic ovary syndrome, comprising the step of delivering to a female in need thereof a composition comprising a compound of formula I, or a tautomer thereof, in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula I is:



I

wherein:

$R^1$  and  $R^2$  are selected from the group consisting of H, alkyl, substituted alkyl, OH, O(alkyl), O(substituted alkyl), O(Acetyl), aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, alkylaryl, substituted alkylaryl, alkylheteroaryl, substituted alkylheteroaryl, 1-propynyl, substituted 1-propynyl, 3-propynyl, and substituted 3-propynyl;

or  $R^1$  and  $R^2$  are joined to form a ring selected from the group consisting of  $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_m\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_p\text{O}-$ ,  $-\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{N}(\text{H})\text{CH}_2\text{CH}_2-$ , and  $-\text{CH}_2\text{CH}_2\text{N}(\text{alkyl})\text{CH}_2\text{CH}_2-$ ;

AHPWA24AUSA

m is an integer from 1 to 4;

n is an integer from 1 to 5;

p is an integer from 1 to 4;

or  $R^1$  and  $R^2$  form a double bond to  $C(CH_3)_2$ ,  $C(\text{cycloalkyl})$ , O, or  $C(\text{cycloether})$ ;

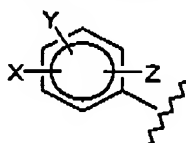
$R^3$  is selected from the group consisting of H, OH,  $NH_2$ ,  $C_1$  to  $C_6$  alkyl, substituted  $C_1$  to  $C_6$  alkyl,  $C_3$  to  $C_6$  alkenyl, substituted  $C_3$  to  $C_6$  alkenyl, alkynyl, substituted alkynyl, and  $COR^A$ ;

$R^A$  is selected from the group consisting of H,  $C_1$  to  $C_3$  alkyl, substituted  $C_1$  to  $C_3$  alkyl,  $C_1$  to  $C_3$  alkoxy, substituted  $C_1$  to  $C_3$  alkoxy,  $C_1$  to  $C_3$  aminoalkyl, and substituted  $C_1$  to  $C_3$  aminoalkyl;

$R^4$  is selected from the group consisting of H, halogen, CN,  $NH_2$ ,  $C_1$  to  $C_6$  alkyl, substituted  $C_1$  to  $C_6$  alkyl,  $C_1$  to  $C_6$  alkoxy, substituted  $C_1$  to  $C_6$  alkoxy,  $C_1$  to  $C_6$  aminoalkyl, and substituted  $C_1$  to  $C_6$  aminoalkyl;

$R^5$  is selected from the group consisting of a), b) and c):

a) a substituted benzene ring having the structure:



X is selected from the group consisting of halogen, OH, CN,  $C_1$  to  $C_3$  alkyl, substituted  $C_1$  to  $C_3$  alkyl,  $C_1$  to  $C_3$  alkoxy, substituted  $C_1$  to  $C_3$  alkoxy,  $C_1$  to  $C_3$  thioalkyl, substituted  $C_1$  to  $C_3$  thioalkyl,  $S(O)alkyl$ ,  $S(O)_2alkyl$ ,  $C_1$  to  $C_3$  aminoalkyl, substituted  $C_1$  to  $C_3$  aminoalkyl,  $NO_2$ ,  $C_1$  to  $C_3$  perfluoroalkyl, 5 or 6 membered heterocyclic ring having 1 to 3 heteroatoms,  $CONH_2$ ,  $CSNH_2$ ,  $CNHNHOH$ ,  $CNH_2NOH$ ,  $CNHNOH$ ,  $COR^B$ ,  $CSR^B$ ,  $OCOR^B$ , and  $NR^C COR^B$ ;

$R^B$  is selected from the group consisting of H,  $C_1$  to  $C_3$  alkyl, substituted  $C_1$  to  $C_3$  alkyl, aryl, substituted aryl,  $C_1$  to  $C_3$  alkoxy, substituted  $C_1$  to  $C_3$  alkoxy,  $C_1$  to  $C_3$  aminoalkyl, and substituted  $C_1$  to  $C_3$  aminoalkyl;

$R^C$  is H,  $C_1$  to  $C_3$  alkyl, or substituted  $C_1$  to  $C_3$  alkyl;

AHPWA24AUSA

Y and Z are independently selected from the group consisting of H, halogen, CN, NO<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkoxy, substituted C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>4</sub> alkyl, substituted C<sub>1</sub> to C<sub>4</sub> alkyl, C<sub>1</sub> to C<sub>3</sub> thioalkyl, and substituted C<sub>1</sub> to C<sub>3</sub> thioalkyl;

b) a five or six membered heterocyclic ring having 1, 2, or 3 heteroatoms selected from the group consisting of O, S, SO, SO<sub>2</sub> and NR<sup>6</sup> and having one or two independent substituents from the group consisting of H, halogen, CN, NO<sub>2</sub>, C<sub>1</sub> to C<sub>4</sub> alkyl, substituted C<sub>1</sub> to C<sub>4</sub> alkyl, C<sub>1</sub> to C<sub>3</sub> alkoxy, substituted C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>3</sub> aminoalkyl, substituted C<sub>1</sub> to C<sub>3</sub> aminoalkyl, COR<sup>D</sup>, CSR<sup>D</sup>, and NR<sup>E</sup>COR<sup>D</sup>;

R<sup>D</sup> is H, NH<sub>2</sub>, C<sub>1</sub> to C<sub>3</sub> alkyl, substituted C<sub>1</sub> to C<sub>3</sub> alkyl, aryl, substituted aryl, C<sub>1</sub> to C<sub>3</sub> alkoxy, substituted C<sub>1</sub> to C<sub>3</sub> alkoxy, C<sub>1</sub> to C<sub>3</sub> aminoalkyl, or substituted C<sub>1</sub> to C<sub>3</sub> aminoalkyl;

R<sup>E</sup> is H, C<sub>1</sub> to C<sub>3</sub> alkyl, or substituted C<sub>1</sub> to C<sub>3</sub> alkyl;

R<sup>6</sup> is H, C<sub>1</sub> to C<sub>3</sub> alkyl, substituted C<sub>1</sub> to C<sub>3</sub> alkyl, or C<sub>1</sub> to C<sub>4</sub>CO<sub>2</sub>alkyl; or

c) an indol-4-yl, indol-7-yl or benzo-2-thiophene moiety, wherein said moiety is optionally substituted by from 1 to 3 substituents selected from the group consisting of halogen, alkyl, substituted alkyl, CN, NO<sub>2</sub>, alkoxy, substituted alkoxy, and CF<sub>3</sub>;

Q<sup>1</sup> is S, NR<sup>7</sup>, or CR<sup>8</sup>R<sup>9</sup>;

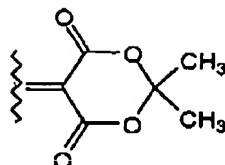
R<sup>7</sup> is selected from the group consisting of CN, C<sub>1</sub> to C<sub>6</sub> alkyl, substituted C<sub>1</sub> to C<sub>6</sub> alkyl, C<sub>3</sub> to C<sub>8</sub> cycloalkyl, substituted C<sub>3</sub> to C<sub>8</sub> cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, SO<sub>2</sub>CF<sub>3</sub>, OR<sup>11</sup>, and NR<sup>11</sup>R<sup>12</sup>;

R<sup>8</sup> and R<sup>9</sup> are independent substituents selected from the group consisting of H, C<sub>1</sub> to C<sub>6</sub> alkyl, substituted C<sub>1</sub> to C<sub>6</sub> alkyl, C<sub>3</sub> to C<sub>8</sub> cycloalkyl, substituted C<sub>3</sub> to C<sub>8</sub> cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, NO<sub>2</sub>, CN, and CO<sub>2</sub>R<sup>10</sup>;

R<sup>10</sup> is C<sub>1</sub> to C<sub>3</sub> alkyl or substituted C<sub>1</sub> to C<sub>3</sub> alkyl;

or CR<sup>8</sup>R<sup>9</sup> comprise a six membered ring having the structure:

AHPWA24AUSA



$R^{11}$  and  $R^{12}$  are independently selected from the group consisting of H, alkyl, substituted alkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, sulfonyl, and substituted sulfonyl; or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

39(Withdrawn). The method according to claim 38, wherein  $R^1$  and  $R^2$  are alkyl or substituted alkyl;  $R^3$  is H.

40(Withdrawn). The method according to claim 38, wherein  $R^1$  and  $R^2$  are joined to form a ring selected from the group consisting of  $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_m\text{CH}_2-$ ,  $-\text{O}(\text{CH}_2)_p\text{O}-$ ,  $-\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2-$ ,  $-\text{CH}_2\text{CH}_2\text{N}(\text{H})\text{CH}_2\text{CH}_2-$ , and  $-\text{CH}_2\text{CH}_2\text{N}(\text{alkyl})\text{CH}_2\text{CH}_2-$ ;  $R^3$  is H.

41(Withdrawn). The method according to claim 38, wherein  $R^3$  is H;  $Q^1$  is S or  $\text{NR}^7$ .

42(Withdrawn). The method according to claim 38, wherein said compound is selected from the group consisting of 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-thione, 3-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzonitrile, 4-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-2-thiophenecarbonitrile, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 4-Methyl-5-(1,2-dihydro-2-thioxospiro[cyclohexane-1,3-[3H]-indol]-5-yl)-2-thiophenethioamide, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-(tert-butoxycarbonyl)-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-



AHPWA24AUSA

thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-H-pyrrole-2-carbonitrile, 5-(2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-3-thiophenecarbonitrile, 5-(1,2-Dihydro-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-2-thiophenecarbonitrile, 5-(3-Fluoro-4-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(2-Amino-5-pyrimidinyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 5-(3-chlorophenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-Benzyl-5-(3-chlorophenyl)-3-methyl-1,3-dihydro-2H-indole-2-thione, 4-(3,3-dimethyl-2-thioxo-2,3-dihydro-1H-indol-5-yl)-2-furonitrile, 5-(3-methoxyphenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-pyridinecarbonitrile, 5-(3,4-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(5-Chloro-2-thienyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-furancarbonitrile, 5-(3-Chloro-4-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chloro-5-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3,5-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-propyl-2-thiophenecarbonitrile, 5-(3-Fluoro-4-nitrophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-furancarbonitrile, 5''-(3-Chlorophenyl)spiro[cyclobutane-1,3''-[3H]indol]-2''(1''H)-thione, 5''-(2-Chlorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5''-(4-Chlorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5-(1'',2''-Dihydro-2''-thioxospiro[cyclohexane-1,3''-[3H]indol]-5''-yl)-4-methyl-2-thiophenecarbonitrile, 5-(1'',2''-Dihydro-2''-thioxospiro[cyclohexane-1,3''-[3H]indol]-5''-yl)-2-thiophenecarbonitrile, 5''-(3-Fluorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5-(3-Hydroxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-chlorophenyl)-3,3-diethyl-1,3-dihydro-2H-indole-2-thione, 5-(4-Fluoro-3-

AHPWA24AUSA

(trifluoromethyl)phenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-n-butyl-2-thiophenecarbonitrile, 5-(3-Fluoro-5-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chlorophenyl)-N-hydroxyspiro[cyclohexane-1,3'-[3H]indol]-2-amine, N-(Acetyloxy)-5'-(3-chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''amine, 5'-(3-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(2-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(4-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3,4-difluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-methoxyphenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-nitrophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-cyanophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 3-(1',2'-Dihydro-2'-(hydroxyimino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluorobenzonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-1-methyl-2-carbonitrile, 5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-2-carbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(acetoxymino)-5'-yl)-2-thiophenecarbonitrile, 3-Fluoro-N'-hydroxy-5-(2'-(hydroxyamino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarboximidamide, N'-Hydroxy-4-(spiro[cyclohexane-1,3'-[3H]indol]-2'-hydroxyimino)-5'-yl-2-thiophenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarboximidamide, 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(3-Cyano-5-fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-

AHPWA24AUSA

thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-3-methyl-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-thiophen-3-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 3-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluoro-benzonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-4-methyl-thiophene-2-carbonitrile, and 4-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

43(Withdrawn). The method according to claim 38, wherein said compound is 5'-(5-Cyano-1-methyl-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.